

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
Redesignation of the 17.7-19.7 GHz Frequency )  
Band, Blanket Licensing of Satellite Earth Stations ) IB Docket No. 98-172  
in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency )  
Bands, and the Allocation of Additional Spectrum in )  
the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency )  
Bands for Broadcast Satellite-Service Use )

To: The Commission

**COMMENTS OF APCO**

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”) hereby submits the following comments in response to the Commission’s Notice of Proposed Rulemaking (“*NPRM*”), FCC 98-235, released September 18, 1998, in the above-captioned proceeding regarding segmentation, sharing, and reallocation of portions of the 18 GHz frequency band.

APCO is the nation’s oldest and largest public safety communications organization, with over 13,000 members involved in the management and operation of law enforcement, fire, emergency medical, and other vital public safety communications systems. APCO is a Commission-certified frequency coordinator for Part 90 Police and Local Government radio frequencies, the newly allocated 700 MHz Public Safety channels, and for all 800 MHz Public Safety channels. APCO appears frequently before the Commission and other government bodies on a wide range of communications matters of particular concern to state and local government public safety agencies. APCO is also

a member of the Fixed Wireless Communications Coalition (“FWCC”), and endorses the FWCC comments being filed in this proceeding. These separate comments of APCO address the specific impact of the Commission’s proposals in the NPRM on current and future public safety communications systems.

State and local government public safety agencies are licensees and major users of private operational fixed microwave facilities in all major fixed service bands, including 18 GHz. Agencies often use fixed microwave to provide the infrastructure to link together command and control dispatch centers with the numerous public safety mobile radio base stations needed to cover a specific area of jurisdiction. For example, many large cities and counties operate large 800 MHz trunked radio systems for their police, fire, emergency medical, and other public safety agencies. However, due to the limited range of 800 MHz signals, many transmitter sites are needed to provide the necessary coverage. Microwave is the only reliable and cost-effective means of linking those sites. Other common public safety uses of microwave frequencies include connecting critical facilities such as police stations, fire stations, hospitals, emergency command centers, traffic control operations, public works facilities, government telecommunications centers, and remote monitoring stations.

Over the next ten years, thousands of new microwave links will be needed to provide the infrastructure for new public safety mobile radio systems that will operate in the 764-776/794-806 MHz band, which was recently reallocated for public safety mobile services.<sup>1</sup> Most of those new 700 MHz band systems will be wide-area trunked

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<sup>1</sup> See First Report and Order in WT Docket 96-86, FCC 98-191 (released September 29, 1998).

operations which, like 800 MHz systems, will require extensive networks of transmitter sites to cover a licensee's area of jurisdiction. Those transmitter sites will need to be linked together, in most cases with fixed microwave frequencies. Wireline connections will not offer adequate reliability and are usually prohibitively expensive for public safety agencies.

The Commission's NPRM regarding the 18 GHz band is just one of many proceedings which threaten the availability of spectrum for public safety and other terrestrial fixed microwave users. The 2 GHz band, which had been the most commonly used public safety fixed service band, is now lost due to the reallocation for PCS and other "new emerging telecommunications technologies." Thousands of microwave users have already been forced to relocate from the lower (1.85-1.99 GHz) portion of the band, with an even larger number of users facing the possibility of forced relocation from the upper (2.1-2.2 GHz) portion of the band. Most of those displaced users will go to the 6, 11, or 18 GHz bands, provided that adequate spectrum is available. At the same time, however, the demand for entirely new microwave links is expanding dramatically,<sup>2</sup> placing additional pressure on what little spectrum is left for fixed services.

Unfortunately, rather than make more spectrum available for fixed services, the Commission is reducing fixed service spectrum to accommodate new satellite operations. In this proceeding, the Commission is proposing to force fixed services to become secondary in two bands, 18.3-18.55 GHz and 18.8-19.3 GHz, where they currently enjoy co-primary status. As discussed in greater detail in the FWCC comments, the overall

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<sup>2</sup> See Public Safety Wireless Advisory Committee Final Report, Volume 2, at 701-705 (estimating that an additional 161 MHz would be needed for public safety fixed microwave systems by 2010).

impact of the Commission's proposal is to reduce the amount of 18 GHz spectrum available for fixed services by over 50%. Furthermore, most of the remaining 18 GHz spectrum would become far less usable as fixed point-to-point services would be required for the first time to share spectrum with point-to-multipoint video distribution services.

APCO is also concerned with the impact of the Commission's proposal on existing 18 GHz licensees. While the Commission does not propose that "grandfathered" licensees be forced to relocate, it does request comments as to whether such relocation may be necessary in the 18.3-18.55 GHz and 18.8-19.3 GHz bands and, if so, under what terms and conditions. *NPRM* at ¶41. APCO strongly opposes any requirement that critical public safety microwave links be relocated, regardless of who pays the cost. Relocation is a time consuming and difficult process that distracts understaffed public safety agencies from performing their principal functions. Furthermore, there are serious questions as to whether there would anyplace left to go for the displaced incumbents. The Commission's relentless reductions in fixed microwave spectrum have closed off most of the replacement bands.

Should the Commission nevertheless permit some form of mandatory relocation from 18 GHz even for grandfathered licensees, it must be subject to guidelines similar to those adopted in ET Docket 92-9 for the 2 GHz bands. There must be reasonable negotiation periods with absolute guarantees that all direct and indirect costs will be reimbursed, and no public safety entity should be forced to vacate existing operations unless comparable replacement frequencies are made available.

## **CONCLUSION**

For the reasons discussed above and in the comments of the Fixed Wireless Communications Coalition, APCO opposes any Commission action that reduces spectrum availability for public safety fixed microwave operations, or disrupts existing public safety communications systems.

Respectfully submitted,

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